## BEFORE THE FEDERAL COMMUNICATIONS COMMISSION WASHINGTON, DC 20554

In the Matter of	)
Use of Spectrum Bands Above 24GHz For Mobile Radio Services	) GN Docket No. 14-177 )
Establishing a More Flexible Framework to Facilitate Satellite Operations in the 27.5-28.35 GHz and 37.5-40 GHz Bands	) IB Docket No. 15-256 )
Petition for Rulemaking of the Fixed Wireless Communications Coalition to Create Service Rules for the 42-43.5 GHz Band	) RM-11664 ) )
Amendment of Parts 1, 22, 24, 27, 74, 80, 90, 95, and 101 To Establish Uniform License Renewal, Discontinuance of Operation, and Geographic Partitioning and Spectrum Disaggregation Rules and Policies for Certain Wireless Radio Services	) WT Docket No. 10-112 ) ) ) ) )
Allocation and Designation of Spectrum for Fixed-Satellite Services in the 37.5-38.5 GHz, 40.5-41.5 GHz and 48.2-50.2 GHz Frequency Bands; Allocation of Spectrum to Upgrade Fixed and Mobile Allocations in the 40.5-42.5 GHz Frequency Band; Allocation of Spectrum in the 46.9-47.0 GHz Frequency Band for Wireless Services; and Allocation of Spectrum in the 37.0-38.0 GHz and 40.0-40.5 GHz for Government Operations	) IB Docket No. 97-95 ) ) ) ) ) ) ) ) ) ) )

Comments of Sony Electronics Inc.

Sony Electronics Inc. ("Sony")<sup>1</sup> respectfully submits the following comments on the Report and Order and Further Notice of Proposed Rulemaking in the above-referenced proceeding.<sup>2</sup> Sony is one of seven parties that have applied for certification to serve as a Spectrum Access System ("SAS")

<sup>&</sup>lt;sup>1</sup> Sony Electronics Inc. is a U.S.-based research, development, marketing, and sales subsidiary of Sony Corporation. Sony entities design, manufacture, and sell mobile products throughout the world, and have conducted extensive research and testing of next-generation wireless services.

<sup>&</sup>lt;sup>2</sup> In the Matter of Use of Spectrum Bands Above 24 GHz for Mobile Radio Services, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 8014, 81 FR 58269 (2016) (FNPRM).

administrator for the Citizens Broadband Radio Service in the 3.5 GHz spectrum band.<sup>3</sup> Based on the encouraging momentum in that proceeding, and on its experience with developing spectrum sharing database technologies, Sony supports the Commission's proposal in the FNPRM to adopt a similar sharing architecture in the 71-76 and 81-86 GHz bands (the "70/80 GHz bands").

In the FNPRM, the Commission proposes to largely duplicate the 3.5 GHz regulatory structure in the 70/80 GHz bands. Specifically, the Commission would:

- Establish three tiers of users: Incumbent Access; Priority Access; and General Authorized Access, with each tier required to protect the tier(s) above it;
- Require continued protection of Federal incumbents;
- Authorize Priority Access Licensees in census tract license areas for one-year, renewable terms;
- Establish two classes of licenses for point-to-point operations: Class A services that would operate at high power levels at a minimum specified height, and which would require professional installation; and Class B services that would operate at lower power levels and heights, and which could be installed by a non-professional;
- Require a Spectrum Access System to, among other things: register, authenticate, and assign
  frequencies and maximum power levels to PAL and GAA users; enforce protection and
  exclusion zones for incumbent federal operations; protect PAL users from interference;
  allocate GAA authorization in a way that maximizes efficient use of the spectrum and
  promotes a stable spectral environment.<sup>4</sup>

The Commission contends that "[b]y leveraging the SAS computational power, protections can be tailored to the characteristics of the systems that require protection, different uses with different characteristics can be coordinated in a similar area, and spectrum efficiency can be maximized."<sup>5</sup>

Sony agrees, and urges the Commission to adopt – with certain modifications -- the proposal to implement the same spectrum-sharing mechanism in the 70/80 GHz bands that is showing such promise

<sup>&</sup>lt;sup>3</sup> See Press Release, FCC, Continuing Momentum in the 3.5 GHz Band (May 17, 2016), available at https://www.fcc.gov/news-events/blog/2016/05/17/continuing-momentum-35-ghz-band (last visited September 30, 2016).

<sup>&</sup>lt;sup>4</sup> FNPRM, 31 Fcc Rcd at 8165-68.

<sup>&</sup>lt;sup>5</sup> *Id.* at 8165.

in the 3.5 GHz band. As to these modifications, Sony first encourages the Commission to promote greater spectral efficiency by implementing a sensor-based system for protecting Federal incumbents. Second, to facilitate this incumbent protection, the Commission should require that 70/80 GHz SASs register the geolocation, antenna height, output power, and frequency data for the CBSDs that they administer with the Commission's Universal Licensing System. Third, the Commission should require the 70/80 GHz SASs to dynamically maximize the number of GAA sites in a given area. Sony believes that with these changes, the approach outlined by the Commission will successfully enable PAL and GAA operations to coexist with Federal and non-Federal incumbents.

Respectfully Submitted,

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